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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/539,418

06/17/2005

Chan-Wah Ng

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EXAMINER

MITCHELL, DANIEL D

ART UNIT

PAPER NUMBER

4134

MAIL DATE

DELIVERY MODE

03/19/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/539,418	Applicant(s) NG ET AL.	
	Examiner DANIEL MITCHELL	Art Unit 4134	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 6/17/2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 June 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>3/16/2006 and 6/17/2005</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1 and 8 are rejected under 35 U.S.C. 102(e) as being anticipated by Michael A Ramalho (U.S. 7,284,068) hereinafter referred to as Ramalho.

As to **claim 1 and 8**, Ramalho discloses a mobile network control apparatus (Fig. 3 - element 314), which maintains a connection that is constructed between a node belonging to a mobile network (Fig. 3 – elements 302a-302n) and a global network (Fig. 3 – element 320) and is constructed through a router apparatus that has an interface having a connection route to said global network and belongs to said mobile network, the mobile network control apparatus comprising: a detection section that detects a failure of packet tunneling executed using a first interface of said router apparatus(column 7, lines 11-24 and column 10, lines 48-66) where the home agent has the functionality to monitor and detect the health of a tunnel of an interface of itself, upon failure the home agent will be able to update the status of all tunnels that has an interface

with the itself and select a viable tunnel to maintain a connection to the global network(Fig. 6B steps 622, 626, and 628 reveal the failure detection functionality and Fig 6C steps 658 and 660 reveal the functionality to build the new tunnel to maintain a connection to the global network); a search section that searches for a second interface of said router apparatus according to the detected failure of the packet tunneling(column 11, lines 4-23); and an execution section that executes packet tunneling using the searched second interface instead of the first interface(column 11, lines 4-23).

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. **Claims 2-7** are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 7,284,068 to Ramalho *et al.* ("*Ramalho*") in view of U.S. PG Publication No. 2004/0090942 A1 to Flinck *et al.* ("*Flinck*").

As to **claim 2**, *Ramalho* discloses a mobile network control apparatus as to the parent claim having an alternative router search section.

Ramalho does not expressly disclose searching for an alternative router apparatus.

Flinck discloses the function of discovering several alternative home agents (page 2, paragraph 26-27).

At the time of invention, it would have been obvious to a person of ordinary skilled in the art to include an alternate router search section upon tunnel failure. The suggestion/motivation would have been to achieve faster recovery within a mobile network (page 2, paragraph 17).

As to **claim 3, 4, 5, and 6** *Ramalho* discloses a mobile network control apparatus as to the parent claim having registration section that binds the care-of address with a home agent (column10 lines 38-47).

Ramalho does not expressly disclose searching for another alternative router apparatus when said registration section fails to register said binding.

Flinck discloses a first home agent that rejects a binding request and returns the addresses of other searched home agents upon the failure of the completion of the registration of an address binding (page 2, paragraphs 20-23).

See similar motivation as claim 2.

As to **claim 6**, *Ramalho* discloses a mobile network control apparatus as to the parent claim having the functionality to search alternate interface of a router.

Ramalho does not expressly disclose an alternative router search section that searches for an alternative router apparatus when the alternative egress interface is not searched by the alternative interface search section.

Flinck discloses a home agent (router apparatus) that does not search for other egress interfaces of a router but does search for other home agents during a home agent discovery process (column 2, paragraph 27).

See similar motivation as claim 2.

As to **claim 7**, *Ramalho* discloses a registration section that registers a binding between an address of the searched alternative egress interface and an address of said router apparatus, and said alternative router search section searches for another alternative egress interface when said registration section fails to register said binding. (Column 10, lines 38-47; column 10, lines 55-57; and column 11, lines 18-21) Figure 6A reveals that if registration is not complete

that the home agent will continue to look for a valid registration request in order to build a tunnel from the home agent.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DANIEL MITCHELL whose telephone number is (571)270-5307. The examiner can normally be reached on Monday - Friday 8:00 am - 5:00 pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lao Lun-yi can be reached on 571-272-7671. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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/D. M./

Examiner, Art Unit 4134

/LUN-YI LAO/

Supervisory Patent Examiner, Art Unit 4134

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